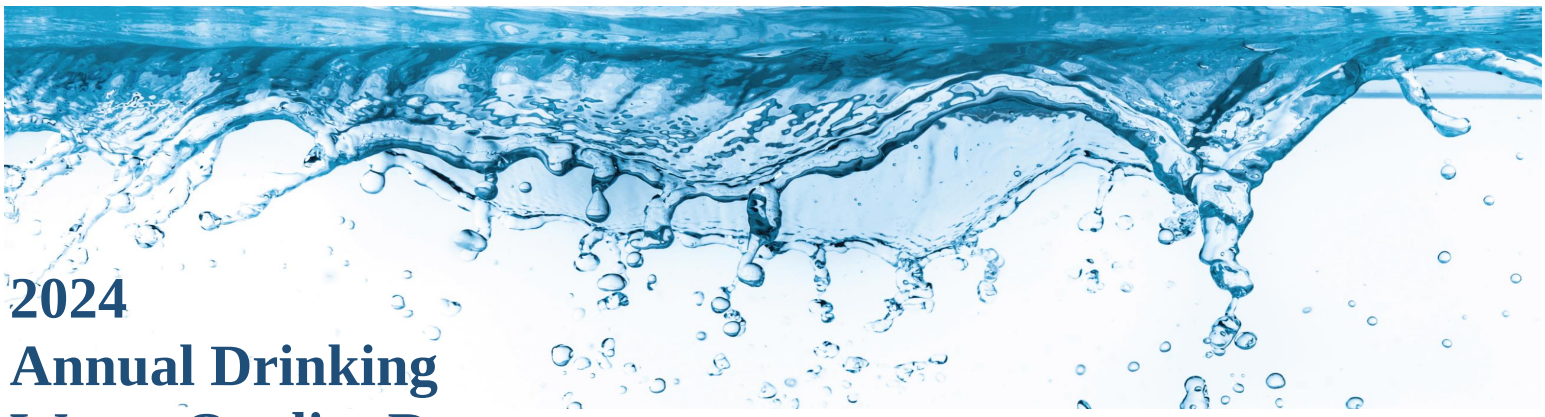

2024 Annual Drinking Water Quality Report

RED BANK DEPARTMENT OF UTILITIES
PWSID 1340001
ANNUAL DRINKING WATER QUALITY REPORT
RESULTS FROM 2023

MAYOR: WILLIAM PORTMAN

BOROUGH COUNCIL

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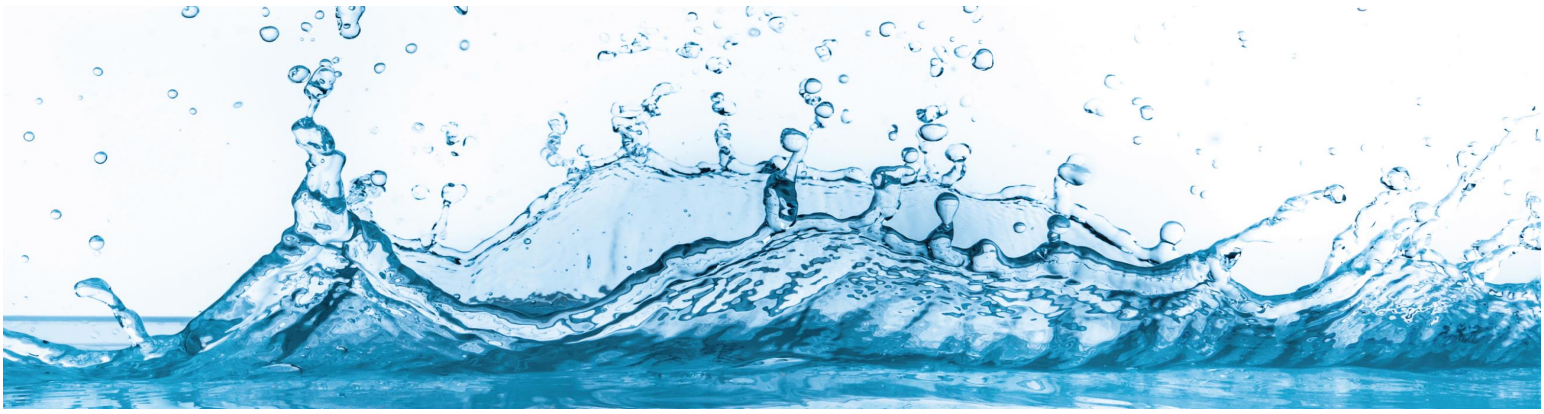
NANCY-FACEY BLACKWOOD	**BEN FOREST**	**LAURA JANNONE**



Annual Drinking Water Quality Report

Red Bank Water Department

For the Year 2024, Results from the Year 2023

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. We are committed to ensuring the quality of your water. Our ground water supply is obtained from four wells. Well #6 and #8 are located at the Red Bank Public Works Department on Chestnut Street. These wells are 700 feet deep and draw water from the Raritan Aquifer Formation. Wells #5 and #7 are located in the Tower Hill area of Red Bank. These wells are 780 feet deep and also draw groundwater from the Raritan Aquifer Formation. During the off-peak months (December-April) Red Bank is required to purchase treated water from the New Jersey American Water Company which obtains supply from the Swimming River Reservoir.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued a Source Water Assessment Report and Summary for this public water system, which is available at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact the Red Bank Water Department or New Jersey American Water Company to obtain information regarding Source Water Assessments.

If you are a landlord, you must distribute this Drinking Water Quality Report to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section #3 of NJ P.L. 2021, c.82 (C.58:12A-12.4 et seq.).

The Red Bank Water Department and New Jersey American Water Company (NJAWC) routinely monitor for contaminants in your drinking water according to Federal and State laws. The tables show the results of that monitoring for the period of January 1st to December 31st, 2023. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Red Bank Water Department 2023 Test Results

PWSID #NJ1340001

Contaminant	Violation Y/N	Range Detected	Units of Measurement	MCLG	MCL	Likely Source
Total Coliform	N	0	cfu	0	<5% of Monthly Samples	Naturally Present in the Environment
Fluoride	N	ND to 0.1	ppm	2	2	Erosion of Natural Deposits
Nitrate	N	ND to 1.6	ppm	10	10	Runoff from Fertilizer Use
Chromium	N	ND to 0.0003	ppb	100	100	Industrial Discharge
Inorganic Contaminants:						
Copper Test results Yr. 2023 Result at 90th Percentile	N	ND – 0.04 No samples exceeded the action level.	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Test results Yr. 2023 Result at 90th Percentile	N	ND – 0.03 No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection Byproducts:						
TTHM Total Trihalomethanes Test results Yr. 2023	N	Range = 1-57 Highest LRAA = 33	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test results Yr. 2023	N	Range = 1 - 44 Highest LRAA = 16	ppb	N/A	60	By-product of drinking water disinfection

Regulated Disinfectants	Level Detected	MRDL	MRDLG
Chlorine Test results Yr. 2023	Range = 0.2 – 2.7 Average = 1.5 ppm	4.0 ppm	4.0 ppm

Secondary Contaminates	Units	RUL	Amount Detected
Sodium	ppm	50	10 - 15
Iron	ppm	0.3	0.25
Hardness	ppm	250	80
Aluminum	ppm	0.05	0.18
Manganese	ppm	0.4	0.04

Polyfluoroalkyl Compounds

Parameter	Unit	Highest Level Detected	Range Detected	Typical Source
Perfluorooctanoic Acid (PFOA)	ng/l	<2	0 to <2	Used for manufacturing of Teflon, Firefighting Foams, Polishes, Films
PFOA has a proposed MCL of 14 ppt				
Perfluoropentanoic Acid	ng/l	<2	0 to <2	Manmade chemical; used in products for stain, grease, heat and water resistance
PFOS has a proposed MCL of 13 ppt				
Perfluorononanoic (PFNA)	ng/l	<2	0 to <2	Manmade chemical; used in products for stain, grease, heat and water resistance

Sources of Lead in Drinking Water

The Red Bank Water Department and New Jersey American Water Company (NJAWC) are responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. Although most lead exposure occurs from inhaling dust or from contaminated soil, or when children eat paint chips, the U.S. Environmental Protection Agency (USEPA) estimates that 10 to 20 percent of human exposure to lead may come from lead in drinking water. Infants who consume mostly mixed formula can receive 40 percent to 60 percent of their exposure to lead from drinking water. Lead is rarely found in the source of your drinking water but enters tap water through corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing materials. These materials include lead-based solder used to join copper pipes, brass, and chrome-brass faucets, and in some cases, service lines made of or lined with lead. New brass faucets, fittings, and valves, including those advertised as "lead-free", may still contain a small percentage of lead, and contribute lead to drinking water. The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent lead to be labeled as "lead free". However, prior to January 4, 2014, "lead free" allowed up to 8 percent lead content of the wetted surfaces of plumbing products including those labeled National Sanitation Foundation (NSF) certified. Visit the NSF website at www.nsf.org to learn more about lead-containing plumbing fixtures. Consumers should be aware of this when choosing fixtures and take appropriate precautions. When water stands in lead service lines, lead pipes, or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon if the water has not been used all day, can contain fairly high levels of lead.

Steps You Can Take to Reduce Exposure to Lead in Drinking Water

For a full list of steps visit: https://www.state.nj.us/dep/watersupply/dwc-lead-consumer.html

Run the cold water to flush out lead. Let the water run from the tap before using it for drinking or cooking any time the water in the faucet has gone unused for more than six hours. The longer the water resides in plumbing the more lead it may contain. Flushing the tap means running the cold-water faucet. Let the water run from the cold-water tap based on the length of the lead service line and the plumbing configuration in your home. In other words, the larger the home or building and the greater the distance to the water main (in the street), the more water it will take to flush properly. Although toilet flushing or showering flushes water through a portion of the plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your health. It usually uses less than one gallon of water.

Use cold, flushed water for cooking and preparing baby formula. Because lead from lead-containing plumbing materials and pipes can dissolve into hot water more easily than cold water, never drink, cook, or prepare beverages including baby formula using hot water from the tap. If you have not had your water sampled or if you know, it is recommended that bottled or filtered water be used for drinking and preparing baby formula. If you need hot water, draw water from the cold tap and then heat it.

Do not boil water to remove lead. Boiling water will not reduce lead; however, it is still safe to wash dishes and do laundry. Lead will not soak into dishware or most clothes.

Use alternative sources or treatment of water. You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or www.nsf.org for information on performance standards for water filters.

Determine if you have interior lead plumbing or solder. If your home/building was constructed prior to 1987, it is important to determine if interior lead solder or lead pipes are present. You can check yourself, hire a licensed plumber, or check with your landlord.

Replace plumbing fixtures and service lines containing lead. Replace brass faucets, fittings, and valves that do not meet the current definition of "lead free" from 2014 (as explained above). Visit the NSF website at www.nsf.org to learn more about lead-containing plumbing fixtures.

Remove and clean aerators/screens on plumbing fixtures. Over time, particles and sediment can collect in the aerator screen. Regularly remove and clean aerators screens located at the tip of faucets and remove any particles.

Test your water for lead. Please call 732-530-2770 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water**.**

Get your child tested. Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about lead exposure. New Jersey law requires that children be tested for lead in their blood at both 1 and 2 years of age and before they are 6 years old if they have never been tested before or if they have been exposed to a known source of lead.

Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

Water softeners and reverse osmosis units will remove lead from water but can also make the water more corrosive to lead solder and plumbing by removing certain minerals; therefore, the installation of these treatment units at the point of entry into homes with lead plumbing should only be done under supervision of a qualified water treatment professional.

Health Effects of Lead
Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development. Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about lead exposure. You can find out more about how to get your child tested and how to pay for it at https://www.state.nj.us/health/childhoodlead/testing.shtml.

In July 2021, P.L.2021, Ch.183 (Law) was enacted, requiring all community water systems to replace lead service lines in their service area within 10 years. Under the law, the Red Bank Water Department is required to notify customers, non-paying consumers, and any off-site owner of a property (e.g., landlord) when it is known they are served by a lead service line*. Our service line inventory is available upon request.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

What are PFOA and PFOS?
Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are per- and polyfluoroalkyl substances (PFAS), previously referred to as perfluorinated compounds, or PFCs, that are man-made and used in industrial and commercial applications. PFOA was used as a processing aid in the manufacture of fluoropolymers used in non-stick cookware and other products, as well as other commercial and industrial uses based on its resistance to harsh chemicals and high temperatures. PFOS is used in metal plating and finishing as well as in various commercial products. PFOS was previously used as a major ingredient in aqueous film forming foams for firefighting and training, and PFOA and PFOS are found in consumer products such as stain resistant coatings for upholstery and carpets, water resistant outdoor clothing, and grease proof food packaging. Although the use of PFOA and PFOS has decreased substantially, contamination is expected to continue indefinitely because these substances are extremely persistent in the environment and are soluble and mobile in water. More information can be found at:
https://www.state.nj.us/dep/wms/bears/docs/2019-4-15-FAQs_PFOS-PFOA-websites-OLA%204-24-19SDM-(003).pdf

Cryptosporidium
Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Cryptosporidium is usually removed through the filtration process and inactivated by other treatment processes. In order to check for the presence of Cryptosporidium, the USEPA issued the Long-Term Enhanced Surface Water Treatment Rule in January 2006. The NJAWC testing exhibited no detectable presence of cryptosporidium on any occasion. Cryptosporidium is effectively removed by filtration, consequently, no finished water delivered by NJAWC has ever shown any presence of Cryptosporidium.

Chlorine / Chloramines: Water additives used to control microbes.

HAA5 and TTHM compliance is based on the Locational Running Annual Average (LRAA), calculated at each monitoring location. The LRAA calculation is based on four completed quarters of monitoring results.

Red Bank Water Department Water Source Susceptibility Chart

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 4			4			4			4			4			4		4				4		4	
GUDI - 0																								
Surface water intakes - 0																								

Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

Nutrients: Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
Volatile Organic Compounds: Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.
Inorganics: Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.
Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to http://www.nj.gov/dep/rpp/radon/index.htm or call (800) 648-0394.
Disinfection Byproduct Precursors: A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Water Quality Results

COASTAL NORTH SYSTEM – PWSID #NJ1345001

New Jersey American Water conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in 2023, certain substances are monitored less than once per year because the levels do not change frequently. For help with Interpreting the tables below, see the "Definition of Tenns" on the previous page. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/ AIDS or other immune system disorders, some elderly, and Infants can be particularly at risk from infection. These people should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline {1-800-426-4791).

TABLE OF DETECTED CONTAMINANTS

NOTE: Regulated contaminants not listed in this table were not found in the treated water supply.

PRIMARY REGULATED SUBSTANCES

LEAD AND COPPER MONITORING PROGRAM – At least 50 tap water samples collected at customer' taps every year

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90" Percentile	No. of Premises Sampled	Permises Above Action Level	Typical Source
Lead (ppb)[1]	2023	Yes	0	15	2	57	1	Corrosion of household plumbing systems.
Copper (ppm)[2]	2023	Yes	1.3	1.3	0.143	57	0	Corrosion of household plumbing systems.

1 - Compliance with the MCL is based on the results reported as the 90th percentile of samples taken. One of the sample site exceeded the action level of 15 ppb.
2 - Compliance with the MCL is based on the results reported as the 90th percentile of samples taken. None of sites sample sites exceeded the action level of 1.3ppm.

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Typical Source
Total Coliform[1]	2023	Yes	0	*TT = Less than 5%	0	Naturally present in the environment
E. Coli[1]	2023	Yes	0	TT = No Confirmed samples	0	Human and animal fecal waste.

Note: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of the water. We are reporting the highest percentage of positive samples/highest number of positive samples in any month.
1 - The Treatment Technique for Total Coliforms requires that if the maximum percentage OR number of total coliform positive samples are exceeded, a system assessment must be conducted, any sanitary defects identified, and corrective actions completed. Additional Level 1 Assessments or level 2 Assessments are required depending on the circumstances.
2 – The Treatment Technique for E. Coli requires that for any routine sample that is positive for total coliform where either the original sample or one of the repeat check samples is also positive for E. Coli, a Level 2 Assessment must be conducted, any sanitary defects identified, and corrective actions completed.

PRIMARY REGULATED SUBSTANCES

DISINFECTANTS BYPRODUCTS Collected in the Distribution System							
Sample Location	Year Sampled	Compliance Achieved	MCLG	MCL	Highest LRAA	Range Detected	Typical Source
DBP2-1	2023	Yes	N/A	80	47	35 to 62	By-product of drinking water disinfection.
DBP2-2	2023	Yes	N/A	80	49	36 to 63	By-product of drinking water disinfection.
DBP2-3	2023	Yes	N/A	80	53	32 to 74	By-product of drinking water disinfection.
DBP2-4	2023	Yes	N/A	80	56	35 to 74	By-product of drinking water disinfection.
DBP2-5	2023	Yes	N/A	80	37	28 to 46	By-product of drinking water disinfection.
DBP2-6	2023	Yes	N/A	80	54	34 to 72	By-product of drinking water disinfection.
DBP2-7	2023	Yes	N/A	80	55	37 to 64	By-product of drinking water disinfection.
DBP2-8	2023	Yes	N/A	80	43	3 to 74	By-product of drinking water disinfection.
DBP2-9	2023	Yes	N/A	80	55	35 to 72	By-product of drinking water disinfection.
DBP2-10	2023	Yes	N/A	80	38	24 to 50	By-product of drinking water disinfection.
DBP2-11	2023	Yes	N/A	80	46	35 to 59	By-product of drinking water disinfection.
DBP2-12	2023	Yes	N/A	80	47	33 to 62	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Rage Detected reflects all samples used to calculate the running annual averages.

PRIMARY REGULATED SUBSTANCES

DISINFECTANTS – byproducts Collected in the Distribution System							
Sample Location	Year Sampled	Compliance Achieved	MCLG	MCL	Highest LRAA	Range Detected	Typical Source
DBP2-1	2023	Yes	N/A	60	16	9 to 28	By-product of drinking water disinfection.
DBP2-2	2023	Yes	N/A	60	16	9 to 26	By-product of drinking water disinfection.
DBP2-3	2023	Yes	N/A	60	7	5 to 8	By-product of drinking water disinfection.
DBP2-4	2023	Yes	N/A	60	9	7 to 12	By-product of drinking water disinfection.
DBP2-5	2023	Yes	N/A	60	19	15 to 24	By-product of drinking water disinfection.
DBP2-6	2023	Yes	N/A	60	12	4 to 15	By-product of drinking water disinfection.
DBP2-7	2023	Yes	N/A	60	20	8 to 43	By-product of drinking water disinfection.
DBP2-8	2023	Yes	N/A	60	10	0 to 15	By-product of drinking water disinfection.
DBP2-9	2023	Yes	N/A	60	8	5 to 9.3	By-product of drinking water disinfection.
DBP2-10	2023	Yes	N/A	60	19	10 to 24	By-product of drinking water disinfection.
DBP2-11	2023	Yes	N/A	60	17	9 to 30	By-product of drinking water disinfection.
DBP2-12	2023	Yes	N/A	60	16	9 to 26	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples used to calculate the running annual averages.

PRIMARY REGULATED SUBSTANCES

DISINFECTANTS –Collected in the Distribution System and at the Treatment Plant							
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MRDLG**	**MCL**	**Compliance Result**	**Range Detected**	**Typical Source**
Entry Point Chloramine Residual (ppm)[1]	2023	Yes	4	4	0.6	0.6 to 3.14	Water additive used to control microbes
Distribution System Chloramine Residual (ppm)[2]	2023	Yes	4	4	1.5	0.09 to 2.96	Water Additive used to control microbes
Entry-Oak Glen Point Chlorine Dioxide (ppe)[3,4]	2023	Yes	800	800	639	115 to 639	Water additive used to control microbes
Distribution System – Howell Chlorite Residual (ppm) [5,6]	2023	Yes	MCLG=0.8	MCL=1	0.49	0.08 to 0.53	Water additive used to control microbes

1 - Data represents the lowest residual entering the distribution system from our water treatment plant.
2 - Data represents the highest quarterly running annual average of chlorine residuals measured throughout our distribution system.
3 - Data represents the highest residual entering the distribution system from our Oak Glen Surface water treatment plant.
4 - Some infants and young children who drink water containing Chlorine Dioxide in-excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in-excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in-excess of the MCL. Some people may experience anemia.
5 - Data represents the highest monthly average of chlorite measured in our Howell distribution system.
6 - Some infants and young children who drink water containing chlorite in-excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in-excess of the MSL. Some people may experience anemia.

	TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant [1]							
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL**	**Range of % Removal Required**	**Range of % removal Achieved**	**Number of Quarters Out of Compliance**	**Typical Source**
Total Organic Carbon (TOC)	2023	Yes	N/A	TT	35% to 62%	26% to 62%	0	Naturally present in the environment.
Ratio of Actual / Required TOC Removal	2023	Yes	N/A	TT	Running annual average >1	1.0% to 1.6%	0	Naturally present in the environment.

1 – System meeting at least one of the alternative compliance criteria in the rule are not required to meet the % removal and can use opt out option.

PRIMARY REGULATED SUBSTANCES

TURBIDITY – Continuous Monitoring at the Treatment Plant							
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL**	**Highest Single Measurement and Lowest Monthly % of Samples <0.3NTU**	**Sample Date of Highest and Lowest Compliance Result**	**Typical Source**
Turbidity (NTU)	2023	Yes	0	TT: Single results > 1 NTU	0	0.02 to 0.2	Soil runoff
	2023	Yes	N/A	TT: At least 95% of samples <0.3 NTU	ND	N/A	Soil runoff

1 - Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

PRIMARY REGULATED SUBSTANCES – Collected at the Treatment Plant							
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL/SMCL**	**Highest Compliance Result**	**Range Detected**	**Typical Source**
Arsenic (ppb)[1]	2023	Yes	0	5	1	ND to 1	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate (ppm)[2]	2023	Yes	10	10	1.85	ND – 1.85	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Alpha Emitters (pCi/L) [3,4]	2022-2023	Yes	0	15	8.34	ND – 8.34	Erosion of natural deposits
Combine Radium 226 & 228 (pCi/L) [5]	2022-2023	Yes	0	5	4.18	ND to 4.18	Erosion of natural deposits
1,2,3 Trichloropropane (ppb)	2023	Yes	0.03	0.03	0.008	ND to 0.008	Halogenated alkane: used as an ingredient in paint, varnish remover, solvents and degreasing agents.

1 - While your drinking water meets the EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to reach the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans.
2 - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrated levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your healthcare provider.
3 - Certain minerals are radioactive and may emit a form of radiation known as alph radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
4 - Alpha Emitters highest compliance results reported for last five years. 2023 highest compliance result is 4.53 pCi/L.
5 - Combined Radium 226 & 228 highest compliance result reported for last five years. 2023 highest compliance result is 1.31 pCi/L

PRIMARY REGULATED SUBSTANCES

OTHER REGULATED SUBSTANCES – Collected at the Treatment Plant							
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL**	**Highest Compliance Result**	**Range Detected**	**Typical Source**
Perfluorooctanoic Acid (PFOA) (ppt)[6]	2023	Yes	NA	14	6.9	ND to 6.9	Discharge from industrial chemical, and manufacturing factories, release of aqueous film forming foam.
Nitrate (ppm)[7]	2023	Yes	NA	13	3.5	ND to 3.5	Discharge from industrial, chemical factories, release of aqueous film forming foam.

6 - Some people who drink water containing PFOA in excess of the MCL over many years could experience problems with their blood serum cholesterol levels, liver, kidney, immune system or, in males, reproductive system. Drinking water containing PFOA in excess of the MCL over many years may also increase the risk of testicular and kidney cancer. For females, drinking water containing PFOA in excess of the MCL over many years may cause developmental delays in a fetus and/or an infant.

7 - Some people who drink water containing PFOS in excess of the MCL over many years could experience problems with their immune system, kidney, liver, or endocrine system. For females, drinking water containing PFOS in excess of the MCL over many years may cause developmental effects and problems with the immune system, liver, or endocrine system in a fetus and/or an infant. Some of these developmental effects can persist through childhood.

SECONDARY SUBSTANCES

SECONDARY SUBSTANCES – Collected at the Treatment Plant [1]							
Substance (with units)	**Year Sampled**	**Compliance Achieved**	**MCLG**	**MCL/SMCL**	**Highest Compliance Result**	**Range Detected**	**Typical Source**
Aluminum (ppm)	2023	NA	NA	0.2	0.03	0 to 0.03	Erosion of natural deposits
Chloride (ppm)	2023	NA	NA	250	60.5	3.8 to 60.5	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Iron (ppm) [2]	2023	NA	NA	0.3	0.31	ND to 0.31	Naturally occurring
Fluoride (ppm) [3]	2023	Yes	2	2	7.2	ND to 0.72	Erosion of natural deposits; water additive which promotes strong teeth
Manganese (ppb) [4]	2023	NA	NA	50	40	ND to 40	Naturally occurring
Sodium (ppm) [5]	2023	NA	NA	50	49.6	4.1 to 49.6	Erosion from naturally occurring deposits: Used in water softener regeneration
Total Hardness (as CaCo3) (ppm)	2023	NA	NA	250	140	72 to 140	Naturally occurring
Zinc (ppm)	2023	NA	NA	5	0.42	ND to 0.42	Erosion from naturally occurring deposits

1 - Substances with Secondary MCLs do not have MCLGs; these limits are primarily established to address aesthetic concerns.
2 - The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.
3 - Fluoride is naturally occurring and/or added to the water. Please see additional on fluoride within this report. Fluoride is added to the water (Monmouth and Ocean County areas of Coastal North System).
3 - The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from high levels which would be encountered in drinking water.
4 - The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from high levels which would be encountered in drinking water.
5 – For healthy individuals the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on sodium restricted diet.

UNREGULATED CONTAMINANT MONITORING RULE

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored. If you are interested in examining the results, please contact New Jersey America Water's Customer Service Center Monday to Friday, 7a.m. to 7p.m. at 1-800-272-1325. More information on the UCMR process, which at this time includes monitoring for 29 PFAS analytes and lithium, is available at https://www/epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule.

The UCMR 5 analytical results are publicly available through the EPA's UCMR 5 Data Finder. The table below provides information on the unregulated contaminants that were detached in the water system.

UNREGULATED CHEMICALS UCMR5 Coastal North System (2023)						
Parameter	**Year Sampled**	**Average Amount Detected**	**Range Low-High**	**Proposed U.S. EPA MCL**	**Hazard Index Calculation**	**Typical Source**
Perfluorooctanoic acid (PFOA)	2023	2.6 ppt	ND to 7.5 ppt	4.0 ppt	N/A	Manufactured chemical(s): used in household goods for stain, grease, heat, and water resistance.
Perfluorooctanesulfonic acid (PFOS)	2023	0 ppt	ND	4.0 ppt	N/A	
Hexafluropropylene oxide dimer acid (HFPO-DA) (GenX chemicals)	2023	0 ppt	ND		0.0045	
Perfluorobutanesulforinc acid (PFBS)	2023	0.49 ppt	ND to 9.2 ppt	Calculate Value: 1 (unitless)		
Perfluorchexane sulfonic acid (PFHxS)	2023	0 ppt	ND			
Perfluorononanoic acis (PFNA)	2023	0 ppt	ND			
Perfluorohexanoic acid (PFHxA)	2023	1.29 ppt	ND to 4.6 ppt	N/A	N/A	
Pefluoropentanoic acid (PFPeA)	2023	1.01 ppt	ND to 4.8 ppt	N/A	N/A	
Perfluorooctane sulfonic acid (6:2FTS)	2023	0.19 ppt	ND to 6.8 ppt	N/A	N/A	
Lithium	2023	0.28 ppb	ND to 10.2 ppb	N/A	N/A	Naturally occurring with multiple commercial use

In 2023, U.S. EPA proposed drinking water standards for six PFAS chemicals – PFOA (4 ppt), PFOS (4 ppt) and GenX, PFBS, PFNA, and PFHxS as a group using a Hazard Index of 1. For more information on the U.S. EPA's proposed PFAS drinking water standards, including the Hazard Index, please visit https://www.epa.gov/pfas.

PFAS chemicals are unique, so two PFAS chemicals at the same level typically do not present the same risk. Therefore, you should not compare the results for one PFAS chemical against the results of another.

ADDITIONAL UNREGULATED SUBSTANCES						
Parameter	**Year Sampled**	**Compliance Achieved**	**MCL/MCLG**	**Average Result**	**Range Detached**	**Typical Source**
1, 4 - Dioxane (ppb)	2023	NA	NA	0.13	ND to 0.16	Used as a solvent in manufacturing and processing of paper, cotton, textile products, automotive coolants, cosmetics, and shampoos.

UNREGULATED CONTAMINANT MONITORING RULE

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored. If you are interested in examining the results, please contact the New Jersey American Water's Customer Service Center Monday to Friday, 7 a.m. to 7 p.m. at 1-800-272-1325. More information on the UCMR process, which at this time includes monitoring for 29 PFAS analytes and lithium, is available at https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule.

The UCMR 5 analytical results are publicly available through the EPA's UCMR 5 Data Finder. The table below provides information on the unregulated contaminants that were detected in the water system.

UNREGULATED CONTAMINANTS NJAW Shorelands System (UCMR5) 2023						
Parameter	**Year Sampled**	**Average Amount Detected**	**Range Low-High**	**Proposed U.S. EPA MCL**	**Hazard Index Calculation**	**Typical Source**
Perfluorooctanoic acid (PFOA)	2023	2.45 ppt	ND to 6.5 ppt	4.0 ppt	N/A	Manufactured chemical(s): used in household goods for stain, grease, heat and water resistance.
Perfluorogexanoic acid (PFHxA)	2023	1.7 ppt	ND to 4.3 ppt	NA	N/A	
Perfluoropentanoic acid (PFPeA)	2023	1.6 ppt	ND to 4.3 ppt	NA	NA	
Lithium	2023	4.21 ppb	ND to 10.6 ppb	NA	NA	Naturally occurring with multiple commercial uses.

In 2023 U.S. EPA proposed drinking water standards for six PFAS chemicals – PFOA (4 ppt), PFOS (4 ppt) and GenX, PFBS, PFNA, and PFHxS as a group using a Hazard Index of 1. For more information on the U.S. EPA's Proposed PFAS drinking water standards, including the Hazard Index, please visit https://www.epa.gov/pfasa.

PFAS chemicals are unique, so two PFAS chemicals at the dame level typically do not present the same risk. Therefore, you should not compare the results for one PFAS chemical against the results of another.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

ESTE INFORME CONTIENE INFORMACION MUY IMPORTANTE SOBRE SU AGUA DE DEBER. TRADUZCALO O HABLE CON ALGUIEN QUE LO ENTIENDA BIEN.

Monitoring Requirements Not Met for *NJAW-Coastal North System*

NJ American Water Coastal North System did not take all required water quality parameter samples after the installation of corrosion control treatment. Even though these were not emergencies of health-based concerns, as our employees, /customers, you have a right to know what happened and what was done to correct these situations.

Water Systems are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards. Coastal North System did not complete all required monitoring for distribution system Orthophospate during the first half of 2023 (January – June) as part of Water Quality Parameter follow-up monitoring for lead and copper rule, and therefore cannot be sure of the quality of your drinking water during that time. Although our system did not meet the follow up Orthophosphate monitoring requirement, the 90th percentile of both lead and copper sampling in 2023 was below the action level.

What should I do?
There is nothing you need to do at this time.

The table below lists the contaminant(s) Coastal North System did not properly test for during the last year, how often we are supposed to sample for these contaminants and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminants	Required sampling frequency	Number of samples taken	When all samples should have been taken	When samples were are will be taken
Orthophosphate	6-Months	4	1/1/23 to 6/30/23	Samples were taken in July & August 2023

What happened? What was done?
Coastal North System installed corrosion control treatment at two treatment plants in 2023. System monitored distribution Water Quality Parameters for pH & Alkalinity and some samples of Orthophosphate during January to June 2023 monitoring period. The System missed a new requirement to conduct follow-up orthophosphate monitoring. The schedule error has been corrected and samples were collected in July and August 2023.

For more information, please contact
Please share this information with all the people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.
This notice is being sent to you by NJ American Water – Coastal North

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